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Nucleotide Sequence																			
	10	20	30	40	50	60	70	80											
1	GGACGTCGAG	GCATTACAA	CGCGAACC	AGCCNTAGCA	TGAAACAGCG	AGCITGCAGC	CTCACCGACG	AGTCTCAACT	80										
81	AAAGGGACT	CCCGGAGCTA	GGGTGGGA	CTCGGCTCA	CACAGTAGT	GCCGGCTATT	GGACTTTTGT	CCAGTGACAG	160										
161	CTGAGACAA	AAGGACCA	GGAGAGGTG	TAGGAGAGAA	GCGCCGCGNA	CAGCGATCGC	CCAGCACCAA	GTCGCTTCC	240										
241	AGGCTTTCG	TTTCTTTGG	TCCATCTTGG	GTGCGCCTTC	CCGGCGTCTA	GGGAGCGNA	GGCTGAGGTG	GCAGCGGCAG	320										
321	GAGAGTCCG	CCCGACAGG	ACGACTCCC	CCACTGGAAA	GGATTCTGNA	AGNAATGAAG	TCAGCCCTCA	GAANTGAAAT	400										
401	TGACTGCCTG	CTGCTTTCC	TGTTGACTGG	CCCGGAGCTG	TACTGCAAGA	CCCTTGTGAG	CTTCCCTTAGT	CTAAGAGTAG	480										
481	GATGCTGCT	GAACTCATCC	NTCAGGTTGA	AGNAGCACTT	GATACAGATG	AGAGGAGAT	GCTGCTCTTT	TTGTGCCGGG	560										
561	ATGTTGCTAT	AGATGTGGTT	CCACCTAATG	TCAGGGACCT	TCTGGTATT	TTACGGGAAA	GAGGTAACT	GTCTGTCGGG	640										
641	GACTTGGCTG	AATGCTCTA	CAGAGTGAGG	CGATTGACC	TGCTCNAACG	TATCTTGAG	ATGGACAGAA	AGCTGTGGA	720										
721	GACCCACCTG	CTCAGGAAAC	CTCACCCTGT	TTCCGACAT	AGAGTGTCTA	TGGCAGAGAT	TGGTGAGGNT	TTGGATTAAT	800										
801	CTGATGTGTC	CTCATTAAT	TTCCCTCATA	AGGATTACAT	GGCCCGAGGC	AAGNTAAGCA	AGGAGAAGNG	TTTCTTGGAC	880										
881	CTGTGGTTG	AGTTGGAGAA	ACTAATTTG	GTGCCCCAG	ATCMACTGGA	TTTATTAAGAA	AATGCCCTAA	AGAACNTCCA	960										
961	CAGAAATAG	CTGAAGACAA	AAATCCAGAA	GTACAAAGCAG	TCTGTTCAG	GAGCAGGGAC	AGTTACAGG	AATGTTCTCC	1040										
1041	AAGCAGCAAT	CCAAAGAGT	CTCAAGGATC	CTTCAATTA	CTTCAGGATG	ATAACACCCCT	ATGCCCATTG	TCCTGATCTG	1120										
1121	AAATTCCTG	GAATTTGTC	CATGAGNTTA	ACNTGGNACT	GCCCTACTAT	AATCATTTCTG	AATGATTAAA	TCGTTTCATT	1200										
1201	TTCTPAAATGT	GTATATATGT	GTTAGCCCT	TTCTTGTTC	TGTATGTTTA	GATGCTTTCC	AATCTTTTGT	TACTACTAAT	1280										
1281	AATGCTATAA	AATAANTATC	CTTGTACTTC	TTAANAANA	AAAAAANA	AAAAAANA	AAAAAANA	AAAAAANA	1360										
1361	AAAAAANA	AAA							1373										

Deduced Amino Acid Sequence

MSAEVINQVEEALDTDEKEMLLFLCRDVAIDVPPNVRLLDILRERKLSVGDIAELLYRVRRFDLLKRILKMDRKAVE
 THLLRNPHLVSDYRVLMAEI GEDLDKSDVSSLIFLMKDYMGRIKISKEKSLDLVVELEKLNLVAPDQLDLEKCLKNII
 RIDLKTAKIQKYKQSVQGGTGYRNVLAQAIQSLKDPNNFRMITPYAHCPDLKILGNCSE

FIG. 2

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Deduced Amino Acid Sequence

MSAEVTHQVEEAEEDTDEKEMLLFLCRDVAIDVPPPMVRDLEDEPERERGKLSVGDIAEELLYRARRFBLKKKTEKMDRKAVE
 TALLRNPHLVSDYRVLMAEIGEDLDKSDVSSIFLMKDYMGKGKISKESFIDLVELEKLNLVAPDQDLLEKCLKNIH
 RIDLTKIQKYKQSVQAGTSYRNVLQAAIQKSLKDPSSNFRLNHNGRSKEQRLKEQLGAQQEPVKKSIQSEAFLPQSIP
 EERYKMKSKPLGICLIIDCIGNETELLRTFTSLGYEVQKFLHLSMHGISQILGQFACMPEHRDYDSFVCVLVSRGGSQS
 VYGVDDQTHSGCLPLHHIRRMFGDSCPYLAGPKMFFIQNYVVSEGLENSLLLEVDPAMKNVEFKAQKRGCLCTVHREAD
 FFWSLCTADMSSLLEQSHSSPSLYLQCLSQKLQERKRPLLDLHIELNGYMYDWNRSRVSAKEYVYVWLQHTLRKKLILSYT

FIG. 1B

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mCASH α	DITQIVARYASMAQ	HQDYDSFACV	LVSLGGSQSMGRDQVMSGFS	LDHVKNMFT	GDTCPSLRGKPKL	FFIQNYESLGS	370							
NCASH α	GISQILGQFACMPE	HROYDSFV	CVLVSRGGSQSVYGV	.....QTHSGLPLHH	IRRMFMGDSCPVLAGKPKMFF	IQNYVVSSEG	385								
CASP-8	EQIYEIKIYQLMD	HSNMDCFCIL	SHGDKGIYGTDL	.....GQEG	PIYELTSQFTGLK	CPSLAGKPKVFF	IQACGGDN	384							
CASP-10	EMENVLQKQKCNPA	HADGDC	FVFCILTHGRFGAVYSSD	.....EALI	PIREIMSHFTALQ	CPRLAEKPKLFF	IQACGGEE	362							
CASP-3	EELVELMRDVSKE	HDKRSSE	FV	CVLLSHGEEQIIFGTN	.....G-PV	DLKKITNFERGDRCSLT	GKPKLFF	IQACGGITE	166						
CASP-1	SDMTTELEAF	AHRPEH	KTSDS	TFLVFM	SHGIREGICGKKHSEQ	VPDILQLNALIFNMLNT	KNCPSL	KDKPKVI	ILQACGGDS	288					
mCASH α	QLEDSS	LEVD	.....GPS	IKNVDSKPLQ	PRHCTTH	FEADL	FWSLCT	ADVSHLEK	PSSSSSVYLQKLSQQL	KQGRARP	442				
NCASH α	QLENSLL	LEV	.....GPAM	KNVEFKAQK	RGLCTVHRE	ADFFWSLCT	ADMSL	LEQSHSSPSLYLQCL	SQKL	RQERKRP	438				
CASP-8	YQKGIP	VE	.....SEEQ	PYLEMD	LSSPQTRY	IPDEAD	FLLGMA	TVNNCVSYRNP	AEGITWYIOSL	CGSLRERC	435				
CASP-10	IQPSVS	LEAD	.....ALN	PEQAP	TSLODS	.....IPA	EADFL	LLGLAT	VPGYVSFRNVEE	GSWYIOSL	CNHLK	KKLVPR	429		
CASP-3	LOC	GIET	.....SG	.....VOD	DMACHK	.....IPV	EADFL	LYAYS	IAPGYYS	SWANSK	DGSWFI	IOSL	CAML	KQYADK	227
CASP-1	PGVVWF	KDS	SVGVS	GNLSL	PTE	.....AH	TEKDF	IAFCS	STPDNV	SVWRHPT	MGSVFI	IGRL	IEHM	QEYACS	381
mCASH α	LVDLHVEL	.....MOK	VYAWN	SGVSSK	.....EKY	SLSLQ	HTLR	KKLI	LAPT	.....	.....	.....	.....	.....	486
NCASH α	LLOLHIEL	NGY	MYDWN	SRVSAK	.....EKY	YVWLQ	HTLR	KKLI	LSYT	.....	.....	.....	.....	.....	481
CASP-8	GDDIL	TLTEV	NYEV	SNKDDKK	.....NMG	KOMP	QPT	FTLR	KKLV	FPSPD	.....	.....	.....	.....	479
CASP-10	HEILSI	LTAV	NDV	SRVVDKQ	.....G	TKKOMP	QPA	FTLR	KKLV	FPPLD	ALSI	.....	.....	.....	480
CASP-3	LEFMH	ILTRV	NRKV	ATEFES	FSFDT	FAHKK	QI	PCIV	SM	TKELLY	FYH	.....	.....	.....	277
CASP-1	COVEE	IFAKV	RF	SFEQ	PD	.....GRA	ND	TT	ERV	TL	TRCF	YLF	PGH	.....	404

FIG. 3C